

IN THE SPECIFICATION:

Please substitute the paragraph beginning at page 1, line 6 and ending at line

10. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

A1
--The present invention relates to a speech synthesis apparatus, which has a database for managing phonemic piece data and performs speech synthesis by using the phonemic piece data managed by the database, a control method for the apparatus, and a computer-readable memory.--

Please substitute the paragraph beginning at page 1, line 11 and ending at line

20. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

A2
B17
--As a conventional speech synthesis method, a synthesis method based on a waveform concatenation scheme is available. In the waveform concatenation synthesis method, the prosody is changed by the pitch synchronous waveform overlap adding method of pasting waveform element pieces corresponding to several pitches at desired pitch intervals. The waveform concatenation synthesis method can obtain more natural synthetic speech than a synthesis method based on a parametric scheme, but suffers the problem of a narrow allowable range with respect to changes in prosody.--

Please substitute the paragraph beginning at page 1, line 21 and ending at page

2, line 1. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

A3
--Under the circumstances, attempts are made to improve the speech quality by preparing various speech data and properly selecting and using them. As a criterion for selection

A3 of speech data, information such as phonemic context (a phoneme to be synthesized or a few phonemes on two sides of the target phoneme) or fundamental frequency F0 is used.--

Please substitute the paragraph¹ beginning at page 2, line 22 and ending at page 3, line 13. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

B2
AX --In order to achieve the above object, a speech synthesis apparatus according to the present invention has the following arrangement. There is provided a speech synthesis apparatus having a database for managing phonemic piece data comprising a generating means, a search means, a research means, and a registration means. The generating means is for generating a second phoneme in consideration of a phonemic context for a first phoneme as a search target. The search means is the searching the database for a phonemic piece data corresponding to the second phoneme. The re-search. The registration means is for registering the search result obtained by the search means or the re-search means in a table in correspondence with the second or third phoneme.--

Please substitute the paragraph beginning at page 3, line 14 and ending at page 4, line 14. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

AX B3 --In order to achieve the above object, there is also provided a speech synthesis apparatus a storage means for storing a table for managing position information indicating a position of phonemic piece data in the database in correspondence with a phoneme obtained in consideration of a phonemic context made to correspond to the phonemic piece data. The speech synthesis apparatus also comprises a calculation means for acquiring each phonemic context

B3
AS
information of a phoneme group as a synthesis target and fundamental frequencies corresponding thereto and calculating an average of acquired fundamental frequencies and a search means for searching a phoneme group corresponding to the phonemic context information from the table. Additionally, the apparatus comprises an acquisition means for acquiring, from the table, position information of phonemic piece data corresponding to a predetermined phoneme of the phoneme group searched out by the search means, on the basis of the average of fundamental frequencies calculated by the calculation means and a changing means for acquiring phonemic piece data indicated by the position information acquired by the acquisition means from the database, and changing a prosody of the acquired phonemic piece data.--

Please substitute the paragraph beginning at page 4, line 15 and ending at line 20. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

AC
--In order to achieve the above object, there is also provided a control method for a speech synthesis apparatus having a database for managing phonemic piece data, comprising a generating step, a search step, a re-search step, and a registration step.--

Please substitute the paragraph beginning at page 4, line 21 and ending at page 5, line 7. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

AR
Sub
B4
--The generating step is for generating a second phoneme in consideration of a phonemic context for a first phoneme as a search target. The search step is for searching the database for a phonemic piece data corresponding to the second phoneme. The re-search step is for generating a third phoneme by changing the phonemic context on the basis of the search

AB
B4
result obtained in the search step, and re-searching the database for phonemic piece data corresponding to the third phoneme. Finally, the registration step is for registering the search result obtained in the search step or the re-search step in a table in correspondence with these cond or third phoneme.--

Please substitute the paragraph beginning at page 5, line 8 and ending at page 6, line 8. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

AS
B5
--In order to further achieve the above object, a control method for a speech synthesis apparatus according to the present invention has the following steps. There is provided a control method for a speech synthesis apparatus for performing speech synthesis by using phonemic piece data managed by a database, comprising the storage step of storing a table for managing position information indicating a position of phonemic piece data in the database in correspondence with a phoneme obtained in consideration of a phonemic context made to correspond to the phonemic piece data and the calculation step of acquiring each phonemic context information of a phoneme group as a synthesis target and fundamental frequencies corresponding thereto and calculating an average of acquired fundamental frequencies. The control method also comprises the search step of searching a phoneme group corresponding to the phonemic context information from the table and the acquisition step of acquiring, from the table, position information of phonemic piece data corresponding to a predetermined phoneme of the phoneme group searched out in the search step, on the basis of the average of fundamental frequencies calculated in the calculation step. Additionally, the method comprises the changing

AS
BS
step of acquiring phonemic piece data indicated by the position information acquired in the acquisition step from the database, and changing a prosody of the acquired phonemic piece data.--

Please substitute the paragraph beginning at page 6, line 9 and ending at page 7, line 4. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

AA
BB
-- To further achieve the above object, a computer-readable memory according to the present invention has the following program codes. There is provided a computer-readable memory storing program codes for controlling a speech synthesis apparatus having a database for managing phonemic piece data, comprising a program code for the generating step of generating a second phoneme in consideration of a phonemic context for a first phoneme as a search target; a program code for the search step of searching the database for a phonemic piece data corresponding to the second phoneme; a program code for the re-search step of generating a third phoneme by changing the phonemic context on the basis of the search result obtained in the search step, and re-searching the database for phonemic piece data corresponding to the third phoneme; and a program code for registration step of registering the search result obtained in the search step or the re-search step in a table in correspondence with the second or third phoneme.--

Please substitute the paragraph beginning at page 7, line 5 and ending at page 8, line 8. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

A10
B11
--Lastly, to further achieve the above object, a computer-readable memory according to the present invention has the following program codes. There is provided a